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December 11, 1998

BY HAND

Magalie Roman Salas, Secretary
Federal Communications Commission
1919 M Street, N.W., Room 222
Washington, D.C. 20554

Re: **Comment Filing**
Satellite Delivery of Network Signals to Unserved Households
CS Docket No. 98-201, RM No. 9335, RM No. 9345

Dear Ms. Salas:

Enclosed are an original and eight copies of the Comments of Primestar Partners, L.P. in these proceedings. We also are forwarding an appropriately formatted diskette to Mr. Fowler.

If you have any questions regarding the enclosed, please contact me.

Very truly yours,

Robert Hoegle

Robert L. Hoegle

RLH:vaa
Enclosures
cc: Mr. Don Fowler (w/disk encl.)
International Transcription Service, Inc. (w/disk encl.)

Before the
Federal Communications Commission
Washington, D.C. 20554

In the Matter of	)	
	)	
Satellite Delivery of Network Signals	)	CS Docket No. 98-201
to Unserved Households for	)	RM No. 9335
Purposes of the Satellite Home	)	RM No. 9345
Viewer Act	)	
	)	
Part 73 Definition and Measurement	)	
of Signals of Grade B Intensity	)	

COMMENTS OF PRIMESTAR PARTNERS, L.P.

Primestar Partners, L.P. ("Primestar") submits these Comments in response to the Notice of Proposed Rulemaking, FCC 98-302 (rel. Nov. 17, 1998) ("Notice"), in this proceeding. As a satellite carrier of network stations to unserved households pursuant to the Satellite Home Viewer Act ("SHVA"), Primestar has a vital interest in the development of a uniform methodology for realistically predicting the extent to which households can receive an over-the-air signal of Grade B "intensity" from their local network affiliate. Given its practical, day-to-day experience as the only satellite carrier providing DBS service which has attempted to address these difficult issues through a negotiated agreement, Primestar believes that it can provide unique insights into the kinds of real world problems which the Commission's rules need to address.

Numerous parties in this proceeding have been involved in lawsuits filed in multiple jurisdictions throughout the country which effectively seek judicial determinations of the circumstances under which distant network signals can be delivered by satellite to "unserved

households" under 17 U.S.C. §119(d)(10).[1] Instead of pursuing litigation, Primestar has sought to work with the networks and their local affiliates to resolve this critical issue through a negotiated agreement, which is part of the record in this proceeding. See Notice at ¶24, n.53. Whether the "unserved household" issue has been addressed by a judicial determination or through private party negotiations, the participants have faced the same problem, namely that the Grade B signal strength values and methodology were developed more than forty years ago, under drastically different circumstances and for entirely different purposes. These factors have precluded an effective and workable solution for the delivery of distant network signals to qualifying "unserved households" for network-affiliated stations, satellite carriers and, most importantly, DBS customers for whom these complex legal and engineering issues have become virtually unintelligible. Currently, each satellite carrier and/or DBS provider uses an entirely different predictive methodology for determining the availability of network signals, which further complicates an already contentious, competitive issue for satellite carriers, broadcasters and consumers. In addition, each satellite carrier or DBS provider differs on the manner and conduct of, and the standards to be used in, testing actual Grade B signal strength at the household location.

Although the Commission "anticipated that the Grade B standard might be used generally to determine the service area, or contour, of a television station," the present Grade B standard has never been intended or designed "to identify individual unserved households." Notice

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[1] Copyright infringement actions have been filed in United States District Courts in the Southern District of Florida, Middle District of North Carolina, and Northern District of Texas, and EchoStar Communications Corporation has filed a declaratory judgment action in the District of Colorado. See Notice at ¶6, n.17 and ¶8, n.23, n.27. Shortly before the Commission released the Notice, the CBS, Fox, ABC and NBC networks and affiliate associations commenced yet another action against EchoStar in United States District Court for the Southern District of Florida. See CBS Broadcasting, Inc., et al. v. EchoStar Communications Corp., et al., Case No. 98-2651 (S.D. Fla.).

at ¶4. Consequently, the current Grade B standard "does not provide assurance of actual signal quality to the viewer." Letter from Larry Irving, Assistant Secretary for Communications and Information, Department of Commerce, September 4, 1998, at 1-2 (citation omitted).

Primestar and representatives of the broadcasters negotiated for more than 18 months before agreeing to the Settlement and Compliance Agreement. Typical of settlement agreements, the final agreement (admittedly cumbersome and complex) is the result of a series of compromises by both sides to resolve legal claims and to address, in what the parties hoped would be a workable and practical way, the unserved household requirement by utilizing the existing Grade B standard. What the parties could or would do necessarily was limited by the Commission's current rules defining a Grade B signal which, as noted above, were created for a different purpose in a different time and, therefore, have obvious shortcomings. Recognizing that the statute or Commission rules may change, the Settlement and Compliance Agreement provides for a reconciliation procedure in the event of a change in law so that the obligations of Primestar and the broadcasters can be made consistent with the prevailing legal standard. See Settlement and Compliance Agreement at §15.

The Commission has identified the three critical issues within the "Grade B construct" which must be addressed to resolve the unserved household issue:

> (1) the signal intensity levels assigned to Grade B; (2) models for predicting where a Grade B signal exists in an area or at an individual point (or household); and (3) the methodologies for testing signal strength in an area or at an individual point.

Notice at ¶22, n.48 (citations omitted). The Commission's expert guidance on each of these issues is needed for a uniform industry-wide resolution of this problem.

I. The Existing Grade B Signal Is Based Upon Outdated Planning Factors And Consumer Acceptance of Picture Quality Which Are No Longer Relevant to Today's Viewer.

By definition, the existing Grade B standard produces a Grade B contour where only "the best 50% of the locations should get an acceptable picture at least 90% of the time." A Grade B standard capturing only the "best 50% of the locations" plainly overstates signal availability and is inadequate under any test of reasonableness. For purposes of identifying "unserved households" under SHVA, the Commission should maintain a time variability factor of 90% and adopt a "confidence variability, which, to apply to the specific location, should be as high as statistically meaningful, 90 or 95%, to correspond to the specific location." Engineering Statement of Hatfield & Dawson Consulting Engineers ("Hatfield & Dawson Engineering Statement"), annexed to the comments of The Satellite Broadcasting and Communications Association ("SBCA"), at 10.

In addition, the planning factors, upon which existing Grade B signal strength values are based, were developed in the 1950s and are now long outdated. In fact, the Commission's staff has confirmed that critical assumptions, appropriate and supportable more than forty years ago, are no longer valid. See Notice at ¶27. The Commission staff determined nearly twenty years ago that four of the seven planning factors used in the Grade B determination needed material revision. See Hatfield & Dawson Engineering Statement at 4-5. For example, as acknowledged by the Commission, the assumption of "the absence of man-made noise or interference from other stations" in rural areas is "probably no longer valid because of the increased number of high voltage power lines and motor vehicle traffic volume." Notice at ¶27, n.62 (citation omitted). Similarly, the planning factors have not been adjusted to conform to the "new" propagation curves adopted in the 1970s. See Hatfield & Dawson Engineering Statement at 4. Updating the planning factors in accordance with data previously developed by the Commission staff will require a significant

increase in the Grade B signal strength values. See SBCA Comments at 12-14; Hatfield & Dawson Engineering Statement, Appendix 2.

Clearly, the picture quality expectations of viewers also have increased over the past forty years, and that change requires a reevaluation and increase of the Grade B signal strengths. As broadcasters have obtained must-carry rights in the last several years, well over two-thirds of all viewers are accustomed to the picture quality of broadcast stations afforded by cable carriage, and virtually all other viewers associate such picture quality with cable or satellite distribution. Having legislatively secured the benefit of such carriage, broadcasters must also accept the increased viewer expectations resulting from it. There can be no doubt that the picture quality acceptable to viewers on their black and white televisions in the early 1950s is unacceptable today.

In short, data already developed by the Commission staff demonstrate that the planning factors for the existing Grade B signal strengths are outdated. However, even when those factors are updated and the signal strength values increased accordingly, the net result will be a picture with a level of quality acceptable in the early 1950s. Consequently, the Commission also must revise the basic level of acceptability to reflect the current viewing experience and demands of consumers.

II. A Predictive Model is Essential to Address the Unserved Household Issue Effectively.

Due to the high capital costs and limited available spectrum, DBS service generally is provided only on a nationwide basis. DBS operators use national advertising campaigns to develop interest in their services and typically accept and process consumer inquiries and orders through national or regional call centers. When a customer calls to ask about the available programming services or to place an order for service, Primestar, or any other satellite carrier, must

have a reliable way to tell the consumer which programming services are available to that specific consumer's household. Commission rules that do not include an effective, rational predictive model consistently applied would perpetuate the increasing consumer uncertainty and dissatisfaction over the lack of availability of network programming services. Conditional responses to availability inquiries followed by mandatory testing would likely increase consumer frustration over these issues. Varying responses from different carriers on either the availability of distant network signals or the appropriate testing regime will lead not only to increased customer confusion but also to competitive imbalance among satellite carriers and DBS providers. Therefore, satellite carriers and DBS providers must have a realistic mechanism for providing consumers timely, definitive and consistent responses on the availability of satellite delivered, distant networks.

Likewise, en masse individualized, household testing, whether on a pre-installation or post-installation basis, is unreasonable, cost-prohibitive, and not consumer friendly. It is unreasonable to require the satellite industry to test each individual household for the availability of distant network signals. Similarly, it is unreasonable for either the customer or the satellite carrier and DBS providers to bear the expense of this testing or to encounter the delay in delivery of service associated with testing. Only a predictive model reliably updated to the 1990s can address the issue fairly.

Pursuant to the Settlement and Compliance Agreement which Primestar negotiated with the networks and their station affiliates, Primestar uses a predictive methodology based upon Grade B contours under the Longley-Rice methodology to classify all households in each zip code as served or unserved depending upon whether the predicted Grade B contour for a station covers

the majority of the population in that zip code.[2] Notwithstanding the good faith efforts of the broadcasters and Primestar to develop a reliable predictive model based upon the existing Grade B standard, Primestar's experience over the past five months suggests that a model based solely on Longley-Rice Grade B contours does not accurately predict the availability of a Grade B signal yielding an "acceptable" picture at an individual's television, as evidenced by significant, intense consumer dissatisfaction with the served/unserved decisions under the existing predictive model and innumerable requests from viewers for waivers and other relief.

The Commission's selection of a predictive model will have a profound impact upon American television households by determining the availability of satellite-delivered distant network stations to millions of households.[3] Notwithstanding the Commission's proposal to use the Longley-Rice 1.2.2 predictive methodology and the use of Longley-Rice data in the Settlement and Compliance Agreement, Primestar respectfully requests that the Commission reexamine the available signal strength predictive methodologies to determine the best methodology for predicting Grade B signal strength at individual household locations.[4] Because the Commission has not evaluated the existing methodologies for making these kinds of "point-to-point" determinations for

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[2] The Settlement and Compliance Agreement also provides for the limited reclassification of zip codes to "unserved" status in the event that there is a significant imbalance between unserved and served households which are reclassified by zip code. See Settlement and Compliance Agreement at §3.2.

[3] According to a preliminary study by the National Telecommunications Information Administration, "depending upon which predictive methodology is used, as many as nine million households (10 percent of American television households) could change from served to unserved households." Notice at ¶14.

[4] For example, the SBCA suggests that the TIREM (Terrain-Integrated Rough Earth Model) methodology "more accurately predicts whether a household can receive a signal of Grade B strength" and offers certain advantages over the Longley-Rice 1.2.2. methodology. SBCA Comments at 15-16. See also Hatfield & Dawson Engineering Statement at 5-12.

households, the Longley-Rice methodology should not be accorded a priority based upon past Commission use for other purposes.[5]

Regardless of the predictive methodology ultimately selected by the Commission, such methodology should incorporate the available data impacting Grade B signal strength at the household. In addition to terrain, which both Longley-Rice 1.2.2 and TIREM may take into account, the Commission should incorporate a "Land Use, Land Clutter" data base developed by the United States Geological Survey to calculate the impact of buildings, foliage, and other land use conditions upon signal strength. See Hatfield & Dawson Engineering Statement at 11-12. The Commission also should consider the effect of interference levels from other stations "which may degrade that signal below acceptable performance levels." Id. at 12. Only with such modifications will the model predict actual signal availability at specific locations. See Hatfield & Dawson Engineering Statement, Appendix 4.

III. A Uniform Method for Testing Signal Strength Available at Individual Households Is Required.

The current method of measuring the field strength of over-the-air signals is costly, presents "inherent difficulties," and "many of its assumptions may not hold in individual situations."[6]

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[5]The Commission's rules also should eliminate the possibility of competing and contradictory claims by multiple broadcast affiliates of the same network. For example, if a particular household does not receive a Grade B signal from the network affiliate in the television market for that household or obtains a waiver from that affiliate, that household should not be subjected to a competing and often contradictory claim from another out-of-market affiliate of the same network whose signal extends to other television markets.

[6] The Commission expressly noted that the following requirements in its existing signal strength test often "ignore reality" when applied to the reception of a signal by a single household: "measurements on a 30-foot antenna;" redirection of the test antenna "to face the direction of the station's tower;" and multiple tests on a "100-foot mobile run." Notice at ¶39.

Notice at ¶¶38-39. Although Primestar and the broadcasters simplified the testing methodology for purposes of a settlement, (see Schedule 7), additional improvements and further simplification are required. The simplified measurement techniques set forth in the Hatfield & Dawson Engineering Statement at 12-13 address a number of the Commission's stated concerns.

Conclusion

Attempts to resolve the "unserved household" issue through litigation and negotiation have yielded contradictory and inaccurate results. Consumer frustration over this issue still abounds. The existing Grade B signal strength values and measurement methodology, developed for different purposes more than forty years ago, are plainly inadequate to identify unserved households under SHVA. The Commission's guidance on each of the three issues included within the "Grade B construct" is required for a uniform and workable determination as to whether an adequate television signal is available at an individual household.

December 11, 1998

Respectfully submitted,

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